Flexibility Management at Entry and Exit

This note details the current arrangements applying at entry and exit in the transitional period for the management of constraints arising from flows above the system capability at entry or exit points. For both entry and exit we initially set out the requirements on Users and then consider the tools available. It should be stated, that the tools described have generally not been designed to manage network flexibility but may be used in resolving problems caused by over utilisation of network flexibility.

In terms of context it is important to note that the tools we use are deployed to manage physical problems on the system and that where possible we allow the market to operate as freely as possible. Our role is largely a residual role and our physical intervention is intended to be “light touch” which follows rather than leads market behaviour.

Entry

There is a UNC obligation on Users to flow at a constant 1/24th flow rate (B2.1.9). This is also supported by the Nomination rules (C1.8) that the Implied Nomination Flow Rate is the Nominated quantity divided by 24.

It is possible for a shipper to create a profile for the gas day to respond to demand or other changes via a series of renominations. The obligation to flow at a constant 1/24th applies to each renomination. Renominations can be submitted up to 04.00 on the Gas Day.

Hourly Forecast supply profiles are only provided at an aggregate (sub terminal) level via the Daily Flow Notification (DFN). Shipper allocations on a daily (end of day basis) are available at D+1, updated at D+5 and finalised at M+15.

If an input constraint arises e.g. high pressure on the system, National Grid will undertake a range of measures to alleviate the constraint e.g.:

- Scaleback of interruptible entry capacity
- Undertake prompt buy back

National Grid may also have a physical requirement to issue a Terminal Flow Advice (TFA) to restrict the flow at an entry point. This is a timely physical measure to enable National Grid to protect the integrity of the NTS in order to meet the statutory obligations for both maximum pipeline pressures and GSMR regulations for Gas Quality. National Grid will lift the TFA as soon as physical conditions allow and, in cases that are not gas quality related, if as a result users End of day positions are affected National Grid will utilise the commercial tools (listed above) to address this.

Where National Grid NTS has identified a potential constraint on the system ahead of the day, we may have entered into constraint management agreements i.e. forwards and options with Users. These contracts may also be used with other tools described above to alleviate a constraint that occurs on the day.

Exit

Direct Connects are required to book their SOQ equal to their maximum hourly offtake rate, as stipulated in their Network Exit Agreement (NExA), multiplied by 24. On the day they must submit offtake profile notices (OPN), which in general show the hourly profile throughout the day, which can be rejected at the time of request by

National Grid if the OPN exceeds the limits agreed in their NExA e.g. ramp rates or would "*of itself and at the time, give rise to an Operational Balancing Requirement*" (J4.5.7).

Distribution Networks book a separate flex product through the OCS process that allows them to vary their gas flow rate throughout the day. In addition they book flat capacity and agree assured offtake pressures with NTS. The combination of these three parameters influences the use of NTS system flexibility. On the day DNs submit OPNs, if the OPN exceeds the OCS flex booking National Grid can reject it at the time of the request.

If a constraint arises at an exit point, National Grid can curtail interruptible loads. An incentive arrangement is in place to manage interruption during the transitional period. Please note that National Grid cannot effect DNs and DCs to change their OPNs if the constraint manifests itself at the exit point sometime after the OPNs have been accepted.

The above are the only mandatory tools National Grid can use to manage an exit constraint, however National Grid will also liaise directly with DNs and direct connects in order to avoid entering an emergency.

In addition National Grid can undertake system balancing actions e.g. locational buys and sells on the OCM to manage a system constraint (this being different to Energy Balancing actions which are not locational in nature). Details of all the tools available to manage system constraints are contained within the System Management Principles Statement. A link to the latest version is provided below:

http://www.nationalgrid.com/uk/Gas/OperationalInfo/operationaldocuments/ProcurementSystemManagementServicesStatementsReports/